

# Caltrans Works to Conserve State's Most Precious Resource:

# Water

**Water. It's vital for each of us to exist, and in California it's rapidly diminishing.**

Caltrans understands the importance of conserving our most precious resource, and we are taking aggressive steps to promote sustainable practices and do our part to save our state's water.

For many areas of California, 2013 was the driest year in the state's recorded history, and in January 2014, Governor Edmund G. Brown, Jr. declared a drought state of emergency directing state officials to take action to conserve water. Governor Brown also called on all Californians to reduce their water use by 20 percent. Caltrans has been a leader in water conservation since the drought of 1976–77, and we are working to conserve more water and cut our irrigation by 50 percent statewide.

Caltrans owns and manages more than 30,000 acres of irrigated landscape. About 75 percent of the water Caltrans uses goes to irrigating highway plants. These plants do more than make our roads look nice. They also help reduce erosion and graffiti, help filter pollutants such as heavy metals from rain runoff, and absorb pollutants from the air.

## What We Are Doing

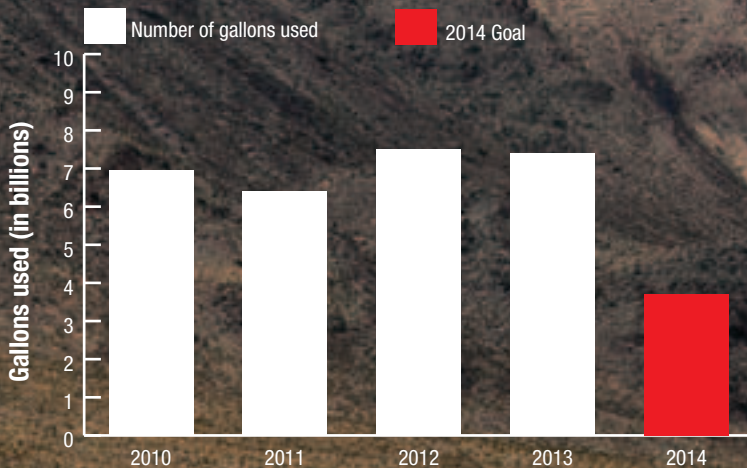
We are making dramatic changes in our irrigation activities, construction practices, and facilities and equipment management to further reduce water use while sustaining the health of roadside plants. To reach our increased water-reduction target, we are:

- No longer watering, or significantly curtailing watering, highway planting in areas of the state suffering the most severe drought effects.
- Accelerating the installation of smart irrigation controllers. Smart irrigation technologies can reduce water use by as much as 50 percent. They automatically turn off when it rains and when it is forecast to rain, apply water only when plants need it, and they shut off and notify the water manager when the system breaks.
- Placing more efficient plumbing fixtures in our buildings.
- Eliminating watering lawns at rest areas and office buildings. In the limited circumstances when we do water these lawns, we are using only onsite, recycled water that would otherwise be wasted or well water that is not planned for human consumption.

*Racetrack Playa is an ancient dry lakebed located in Death Valley National Park and famous for its moving rocks that inscribe long tracks in their wake across the smooth, dry valley floor without human or animal intervention.*



## Total Statewide Landscape Water Use



All state departments in California are using 2010 as the base year to evaluate conservation efforts.

- Partnering with local water purveyors to increase the use of recycled water wherever possible.
- No longer washing state vehicles, except when necessary for safety.
- Delaying nonessential landscape projects in severely drought-affected areas until the next rainy season.
- Using dust suppressants instead of water to suppress dust at our construction sites.

Caltrans supports the [www.saveourh2o.org](http://www.saveourh2o.org) campaign. We have used California's electronic highway message signs to raise awareness of the severe drought and encourage Californians to conserve water. The signs were activated when there were no critical emergency or traffic safety messages or Amber Alerts, and we plan to activate them throughout the drought as needed.

This is just a small list of what Caltrans is doing to save California's precious water. The future of the drought is uncertain, but we will continue to do our part toward sustainable water practices.

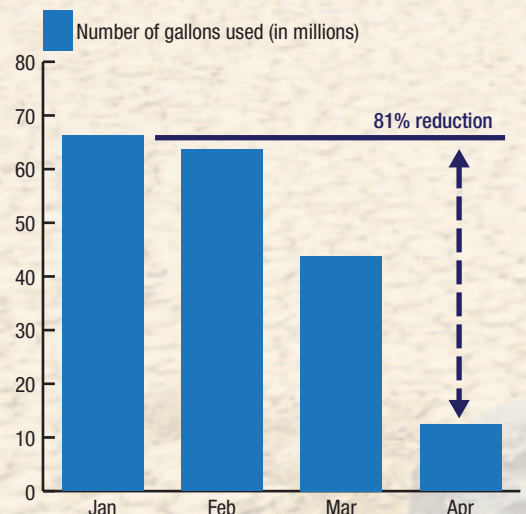
Contributors: Keith Robinson, Division of Design and Ken Murray, Division of Maintenance

## Caltrans District 12 Shows Savings

Caltrans' 2014 water conservation efforts are already showing savings in Orange County, via a pilot project that updated the landscape irrigation controllers allowing even closer monitoring of use. From January through April, water reduction efforts resulted in a savings of 53 million gallons, or 81 percent less than 2013 use over the same period. These are the kind of results we'll need state-wide to help meet the Governor's order for water conservation.

Statewide, Caltrans works with more than 7,500 water agencies. It's not your average water bill we deal with on a monthly basis, but that doesn't change the fact that we have to be innovative, creative, and aggressive with how we use this vital resource.

## Orange County Water Reduction\* (January–April 2014)



\* In Orange County, Caltrans conducted a pilot project that updated the landscape sprinkler controllers. The new controllers provide water use data, so we are more confident in the reduction of water use.